

Outbound Routing Guide

The intention of this guide is to demonstrate, by example, some of the common things end users want done with Outbound Routing. Don't forget that new routes need to be added to a Class of Service before the extensions will see them as a valid outbound route.

Block Calls

In this example, the end user wants to block their users from dialing 1900 numbers. I would add a route and configure it as in the image below. Configured as such, this subroute will be selected for any 11 digit numbers starting with the pattern 1900, and since there are no trunks assigned as paths for the call to take, anyone dialing this number will get a busy tone back.

Edit Outbound Route	
Route Name	<input type="text" value="Block 900"/>
Route Type	<input type="text" value="1+ Dialing (11 Digits)"/>
Number	<input type="text" value="900"/>
Trunks:	<div style="display: flex; align-items: center;"><div style="border: 1px solid #ccc; padding: 2px; margin-right: 10px;">^</div><div style="border: 1px solid #ccc; padding: 2px; margin-right: 10px;">v</div><div style="margin-right: 10px;">Up</div><div style="margin-right: 10px;">Dn</div><div style="margin-right: 10px;">Add</div><div style="margin-right: 10px;">Delete</div><div style="margin-right: 10px;">Strip Digits <input type="text"/></div><div>Prefix Digits <input type="text"/></div></div> <div style="margin-top: 5px;"><input type="text" value="TwoDotFortyEight"/> <input type="text"/></div>
Disable Ext CID Override	<input type="text" value="no"/>
Override Default CID(name)	<input type="text" value="no"/>
Override CID Name	<input type="text"/>
Override Default CID(number)	<input type="text" value="no"/>
Override CID Number	<input type="text"/>
<input type="button" value="Save Changes"/>	

Utility Routes

In this example, the end user wants to be able to dial a 4 digit code from any phone that will dial out to a particular PSTN, and has multiple codes that should dial different numbers. I would create a new Parent route, and build subroutes off of the parent for each Utility Route. The first image below is the parent, and the other image is the child. In this example, the utility codes will be in the 6000 range.

Edit Outbound Route	
Route Name	<input type="text" value="Utility Parent"/>
Route Type	<input type="text" value="New Route"/>
Start Pattern	<input type="text" value="6X"/>
Digits	<input type="text" value="4"/>
Exact Length	<input type="text" value="Yes"/>
Subroute Digits	<input type="text" value="3"/>
Subroute Offset	<input type="text" value="1"/>
Trunks:	<div style="display: flex; align-items: center;"><div style="border: 1px solid gray; padding: 2px; margin-right: 10px;">↑</div><div style="border: 1px solid gray; padding: 2px; margin-right: 10px;">Up</div><div style="border: 1px solid gray; padding: 2px; margin-right: 10px;">Dn</div><div style="border: 1px solid gray; padding: 2px; margin-right: 10px;">Add</div><div style="border: 1px solid gray; padding: 2px; margin-right: 10px;">test</div><div style="border: 1px solid gray; padding: 2px; margin-right: 10px;">Delete</div><div style="margin-left: 20px;">Strip Digits <input type="text"/></div><div style="margin-left: 20px;">Prefix Digits <input type="text"/></div></div>
Disable Ext CID Override	<input type="text" value="no"/>
Override Default CID(name)	<input type="text" value="no"/>
Override CID Name	<input type="text"/>
Override Default CID(number)	<input type="text" value="no"/>
Override CID Number	<input type="text"/>
<input type="button" value="Save Changes"/>	

*Note there are no trunks set. This is because this is the Parent route that does not have any particular code or phone number that will be dialed out. Those will be handled with the Children built as subroutes off of the parent.

Edit Outbound Route													
Route Name	<input type="text" value="Utility Child"/>												
Route Type	<input type="text" value="Utility Parent"/>												
Number	<input type="text" value="002"/>												
Trunks:	<table border="0"> <tr> <td><input type="text" value="test"/></td> <td><input type="button" value="Up"/></td> <td><input type="text" value="Strip Digits"/></td> </tr> <tr> <td></td> <td><input type="button" value="Dn"/></td> <td><input type="text" value="Prefix Digits"/></td> </tr> <tr> <td></td> <td><input type="button" value="Add"/> <input type="text" value="test"/></td> <td></td> </tr> <tr> <td></td> <td><input type="button" value="Delete"/></td> <td></td> </tr> </table>	<input type="text" value="test"/>	<input type="button" value="Up"/>	<input type="text" value="Strip Digits"/>		<input type="button" value="Dn"/>	<input type="text" value="Prefix Digits"/>		<input type="button" value="Add"/> <input type="text" value="test"/>			<input type="button" value="Delete"/>	
<input type="text" value="test"/>	<input type="button" value="Up"/>	<input type="text" value="Strip Digits"/>											
	<input type="button" value="Dn"/>	<input type="text" value="Prefix Digits"/>											
	<input type="button" value="Add"/> <input type="text" value="test"/>												
	<input type="button" value="Delete"/>												
Disable Ext CID Override	<input type="text" value="no"/>												
Override Default CID(name)	<input type="text" value="no"/>												
Override CID Name	<input type="text"/>												
Override Default CID(number)	<input type="text" value="no"/>												
Override CID Number	<input type="text"/>												
<input type="button" value="Save Changes"/>													

*For the Child subroute, the number will be the last 3 digits of the code the user dials. For any trunks you add to the route, you must be sure to set Strip Digits to 4 (removes the dialed code) and to set Prefix Digits to the number you want dialed out the lines when the 4 digit code is dialed from an extension.

Least Cost Routing

In this example, the end user has multiple providers in different regions, and wants dialed calls to use the most cost effective trunk when dialing out. The first image represents your standard 1+ (11 Digit) dialing route just as it appears on the system by default. This image shows Subroute Offset = 1 (ignores the first digit dialed, this case being the 1 for a long distance number) and Subroute Digits = 3 (after ignoring the first digit from subroute offset, this reads the next 3 digits (area code) in the dialed string and compares them to any subroutes created). Below that will be a subroute that specifically routes calls dialed to the 941 area code through a different, more cost efficient trunk.

Edit Outbound Route	
Route Name	<input type="text" value="1+ Dialing (11 Digits)"/>
Route Type	<input type="text" value="1+ Dialing (11 Digits)"/>
Start Pattern	<input type="text" value="1N"/>
Digits	<input type="text" value="11"/>
Exact Length	<input type="text" value="Yes"/>
Subroute Digits	<input type="text" value="3"/>
Subroute Offset	<input type="text" value="1"/>
Trunks:	<div style="display: flex; align-items: flex-start;"> <div style="border: 1px solid gray; padding: 5px; margin-right: 10px;"> Analog1 Analog2 </div> <div style="display: flex; flex-direction: column; gap: 5px;"> <input type="button" value="Up"/> <input type="button" value="Dn"/> <input type="button" value="Add"/> <input type="button" value="Delete"/> </div> <div style="margin-left: 10px;"> <input type="text" value="Analog1"/> </div> </div> <div style="margin-top: 10px;"> <input type="text" value="Strip Digits"/> <input type="text" value="Prefix Digits"/> </div>
<input type="button" value="Save Changes"/>	

*Note that the normal 11 Digit route is using analog 1 and analog 2 for trunks.

Edit Outbound Route	
Route Name	<input type="text" value="Area Code 941"/>
Route Type	<input type="text" value="1+ Dialing (11 Digits)"/>
Number	<input type="text" value="941"/>
Trunks:	<div style="display: flex; align-items: flex-start;"> <div style="border: 1px solid gray; padding: 5px; margin-right: 10px;"> gateway </div> <div style="display: flex; flex-direction: column; gap: 5px;"> <input type="button" value="Up"/> <input type="button" value="Dn"/> <input type="button" value="Add"/> <input type="button" value="Delete"/> </div> <div style="margin-left: 10px;"> <input type="text" value="Analog1"/> </div> </div> <div style="margin-top: 10px;"> <input type="text" value="Strip Digits 4"/> <input type="text" value="Prefix Digits"/> </div>
<input type="button" value="Save Changes"/>	

*Note that this subroute has gateway set as the trunk. In this example, gateway is a different Provider that is in the 941 area code, making it so that the number (originally dialed as 19413062200) only needs to be dialed out as a 7 digit local number. Due to this, you can see that the trunk has had Strip Digits set to 4, removing the first 4 digits in the string (1941) before dialing out the trunk.

